Serial No. 10/006,543
Filed November 30, 2001

Exhibit B
'tzlas01.log'

```
SQL> @tzlas01
SQL>
SQL> CONNECT LBACSYS/LBACSYS
Connected.
SQL>
SQL> -- Create two SA policies
SQL> EXECUTE SA_SYSDBA.CREATE_POLICY('SA1','SA1_COL','ALL_CONTROL');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_SYSDBA.CREATE_POLICY('SA2','SA2_COL','NO_CONTROL');

PL/SQL procedure successfully completed.

SQL>
SQL> -- Initialize PUBLIC labels for them
SQL> EXECUTE SA_LABELS.CREATE_LEVEL('SA1',0,'PUBLIC','PUBLIC Level');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_LABELS.CREATE_LEVEL('SA2',0,'PUBLIC','PUBLIC Level');

PL/SQL procedure successfully completed.

SQL>
SQL> EXECUTE SA_LABEL_ADMIN.CREATE_LABEL('sa1',10,'public');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_LABEL_ADMIN.CREATE_LABEL('sa2',10,'public');
BEGIN SA_LABEL_ADMIN.CREATE_LABEL('sa2',10,'public'); END;

*
ERROR at line 1:
ORA-12432: LBAC error: Label with the given label_tag: 10 already exists
ORA-06512: at "LBACSYS.LBAC_STANDARD", line 0
ORA-06512: at "LBACSYS.LBAC_LABEL_ADMIN", line 57
ORA-06512: at line 1


SQL>
SQL> -- Setup some labels for policy SA1
SQL> EXECUTE SA_LABELS.CREATE_LEVEL('sa1',10,'c','confidential');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_LABELS.CREATE_LEVEL('sa1',20,'s','SECRET');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_LABELS.CREATE_LEVEL('sa1',30,'ts','Top Secret');

PL/SQL procedure successfully completed.

SQL>
SQL> EXECUTE SA_LABELS.CREATE_COMPARTMENT ('sa1', 5, 'A', 'ALPHA');
```

```
PL/SQL procedure successfully completed.

SQL> EXECUTE SA_LABELS.CREATE_COMPARTMENT ('sa1', 10, 'b', 'beta');

PL/SQL procedure successfully completed.

SQL>
SQL> EXECUTE SA_LABELS.CREATE_GROUP ('sa1', 5, 'G1','group 1');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_LABELS.CREATE_GROUP ('sa1', 51, 'G2','group 2','G1');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_LABELS.CREATE_GROUP ('sa1', 52, 'G3','group 3','G1');

PL/SQL procedure successfully completed.

SQL>
SQL> EXECUTE SA_LABEL_ADMIN.CREATE_LABEL('sa1', 200,'c');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_LABEL_ADMIN.CREATE_LABEL('sa1', 225,'c:b,a');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_LABEL_ADMIN.CREATE_LABEL('sa1',210,'c:a');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_LABEL_ADMIN.CREATE_LABEL('sa1',205,'c::g2');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_LABEL_ADMIN.CREATE_LABEL('sa1', 300,'s');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_LABEL_ADMIN.CREATE_LABEL('sa1', 310,'s:a');

PL/SQL procedure successfully completed.

SQL>
SQL> -- Generate some labels
SQL> SELECT LABEL_TO_CHAR(TO_SA_LABEL('sa1','c:a:g1')) FROM DUAL;

LABEL_TO_CHAR(TO_SA_LABEL('SA1','C:A:G1'))
-------------------------------------------------------------------------------
-
C:A:G1

1 row selected.

SQL> SELECT LABEL_TO_CHAR(TO_SA_LABEL('sa1','s:a,b')) FROM DUAL;
```

```
LABEL_TO_CHAR(TO_SA_LABEL('SA1','S:A,B'))
--------------------------------------------------------------------------------
-
S:A,B

1 row selected.

SQL> SELECT LABEL_TO_CHAR(TO_SA_LABEL('sa1','public:a:g1')) FROM DUAL;

LABEL_TO_CHAR(TO_SA_LABEL('SA1','PUBLIC:A:G1'))
--------------------------------------------------------------------------------
-
PUBLIC:A:G1

1 row selected.

SQL>
SQL> COL POLICY_NAME FORMAT A15
SQL> COL LABEL FORMAT A20
SQL> SELECT * FROM DBA_SA_LABELS;

POLICY_NAME     LABEL                 LABEL_TAG LABEL_TYPE
--------------- -------------------- ---------- ---------------
SA1             PUBLIC                       10 USER LABEL
SA1             C                           200 USER/DATA LABEL
SA1             C::G2                       205 USER/DATA LABEL
SA1             C:A                         210 USER/DATA LABEL
SA1             C:A,B                       225 USER/DATA LABEL
SA1             S                           300 USER/DATA LABEL
SA1             S:A                         310 USER/DATA LABEL
SA1             C:A:G1               1000000000 USER/DATA LABEL
SA1             S:A,B                1000000001 USER/DATA LABEL
SA1             PUBLIC:A:G1          1000000002 USER/DATA LABEL

10 rows selected.

SQL>
SQL> col labelvalue format a20
SQL> col policy_name format a10
SQL> SELECT * from dba_sa_labels;

POLICY_NAM LABEL                 LABEL_TAG LABEL_TYPE
---------- -------------------- ---------- ---------------
SA1        PUBLIC                       10 USER LABEL
SA1        C                           200 USER/DATA LABEL
SA1        C::G2                       205 USER/DATA LABEL
SA1        C:A                         210 USER/DATA LABEL
SA1        C:A,B                       225 USER/DATA LABEL
SA1        S                           300 USER/DATA LABEL
SA1        S:A                         310 USER/DATA LABEL
SA1        C:A:G1               1000000000 USER/DATA LABEL
SA1        S:A,B                1000000001 USER/DATA LABEL
SA1        PUBLIC:A:G1          1000000002 USER/DATA LABEL

10 rows selected.

SQL>
SQL> -- Set user labels
SQL> EXECUTE SA_USER_ADMIN.SET_LEVELS('sa1','scott','s','c');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_USER_ADMIN.SET_COMPARTMENTS('sa1','scott','a,b');

PL/SQL procedure successfully completed.

SQL> EXECUTE SA_USER_ADMIN.SET_GROUPS('sa1','scott','G1');

PL/SQL procedure successfully completed.

SQL> SELECT * FROM dba_sa_user_levels ORDER BY policy_name, user_name;

POLICY_NAM USER_NAME                      MAX_LEVEL
---------- ------------------------------ ------------------------------
MIN_LEVEL                      DEF_LEVEL
------------------------------ ------------------------------
ROW_LEVEL
------------------------------
SA1        SCOTT                          S
C                              S
S


1 row selected.

SQL> SELECT * FROM dba_sa_user_compartments ORDER BY policy_name, user_name;

POLICY_NAM USER_NAME                      COMP                           RW_AC
D
---------- ------------------------------ ------------------------------ -----
-
R
-
SA1        SCOTT                          A                              WRITE
Y
Y

SA1        SCOTT                          B                              WRITE
Y
Y


2 rows selected.

SQL> SELECT * fROM dba_sa_user_groups ORDER BY policy_name, user_name;

POLICY_NAM USER_NAME                      GRP                            RW_AC
D
---------- ------------------------------ ------------------------------ -----
-
R
-
SA1        SCOTT                          G1                             WRITE
Y
```

```
Y


1 row selected.

SQL>
SQL> -- Look at session labels
SQL> CONNECT scott/tiger
Connected.
SQL>
SQL> create or replace FUNCTION get_list (pol IN VARCHAR2)
  2  RETURN VARCHAR2 IS
  3    test_list lbacsys.lbac_label_list;
  4  begin
  5    test_list:=lbac_session.effective_labels(pol);
  6    RETURN label_list_to_named_char(test_list,'effective');
  7  END;
  8  /

Function created.

SQL>
SQL> select get_list('sa1') from dual;

GET_LIST('SA1')
--------------------------------------------------------------------------------
-
MAX READ LABEL='S:A,B:G1,G2,G3',MAX WRITE LABEL='S:A,B:G1,G2,G3',MIN WRITE
LABEL
='C',READ LABEL='S:A,B:G1,G2,G3',WRITE LABEL='S:A,B:G1,G2,G3',ROW
LABEL='S:A,B:G
1,G2,G3'


1 row selected.

SQL> select get_list('sa2') from dual;

GET_LIST('SA2')
--------------------------------------------------------------------------------
-


1 row selected.

SQL>
SQL> SQL>
```